

HW18

P92

$$25. \quad x^2 - 8x + 5 = x^2 - 8x + 10 - 11$$

$$x^2 - 8x + 5 = x^2 - 8x + 5 \checkmark$$

identity

$$26. \quad x^2 + 6x - 4 = x^2 + 6x - 4 \checkmark$$

identity

$$33. \quad x = 4$$

$$35. \quad -2x = 18$$

$$x = -9$$

$$37. \quad x = 12$$

$$39. \quad -y + 2 = 7 - 6y$$

$$-5 = -5y$$

$$1 = y$$

$$69. \quad \left(\frac{3}{x^2 - 3x} + \frac{4}{x} = \frac{1}{x-3} \right)^{x(x-3)}$$

$$3 + 4(x-3) = x$$

$$3 + 4x - 12 = x$$

$$-9 = -3x$$

$$3 = x \rightarrow \text{extraneous solution.}$$

$$71. \quad x^2 + 4x + 4 + 5 = x^2 + 6x + 9$$

$$4x + 9 = 6x + 9$$

$$0 = 2x$$

$$\boxed{0 = x}$$

$$81. \quad y = 12 - 5(0) \quad (0, 12)$$

$$y = 12$$

$$0 = 12 - 5x$$

$$5x = 12 \quad (12/5, 0)$$

$$x = 12/5$$

$$82. \quad y = 16 - 3(0) \quad (0, 16)$$

$$y = 16$$

$$0 = 16 - 3x$$

$$3x = 16 \quad (16/3, 0)$$

$$x = 16/3$$

$$83. \quad y = -3(2(0) + 1) \quad (0, -3)$$

$$y = -3(1) = -3$$

$$0 = -3(2x + 1)$$

$$0 = 2x + 1 \quad (-1/2, 0)$$

$$-1 = 2x$$

$$-1/2 = x$$